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ABSTRACT

This report provides information about the performance of 1991 graduating seniors nationwide who took the American College Testing (ACT) Program Assessment as juniors or seniors. All the average scores in this report are on the scale for the Enhanced ACT Assessment, which was introduced in October 1989. Averages for 1987-89 are based on scores estimated from a concordance table linking the scales for the original ACT Assessment and the Enhanced ACT Assessment. Students who prepared academically by taking a core high school program scored higher on the ACT than those who did not take a core high school program. Efforts to improve the quality of the traditional college-preparatory core curriculum will probably have positive effects on average ACT scores of students who take that core curriculum. Eight tables of test results present the following data: (1) average ACT scores by type of high school program; (2) average ACT scores by type of high school program and racial-ethnic group; (3) trends in average ACT composite scores across 5 years by type of high school program and ethnic-racial group; (4) average ACT composite scores by type of high school program, racial-ethnic group, and annual family income; (5) average high school grade point averages; (6) expressed need for help with academics; (7) percentages of students choosing selected majors by graduation year and gender; and (8) trends in average ACT composite scores. (SLD)

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ACT ASSESSMENT RESULTS

NATIONAL
1991

This report provides information about the performance of 1991 graduating seniors nationwide who took the ACT Assessment as juniors or seniors. As you review and interpret the information it provides, please keep the following in mind:

•All the average scores in this report are on the scale for the Enhanced ACT Assessment, which was introduced in October 1989. Averages for 1987-1989 are based on scores estimated from a concordance table linking the scale for the original version of the ACT Assessment to that of the Enhanced ACT Assessment.

•ACT-tested seniors may not be representative of the total population of graduating seniors.

•This summary report provides a selection of facts about the nation's ACT-tested graduating seniors. For more details, please refer to the 1991 national High School Profile Report.

Average ACT Scores

NATIONAL
1991

To help policy-makers gain a better perspective on the association between coursework taken in high school and performance on the ACT Assessment, we are again providing information about the graduating class according to type of high school program. Average scores are reported for 1991 graduating seniors who elected to complete core high school coursework and for those who did not.

The academic preparation a student receives in high school correlates with success in college. ACT research consistently indicates that students who prepare academically by taking a core high school program score higher on the ACT Assessment than those who do not. This association generally holds true across ability levels, ethnic groups, and family income levels. Better-prepared students also earn better grades in college. Information such as this provides powerful support for the value of a strong basic program of study in high school. Efforts to improve the quality of the traditional college-preparatory core curriculum will likely have positive effects on average ACT scores of students who take that core curriculum.

In a few instances, the patterns of performance on the ACT Assessment according to type of high school program described above may not be observed. Such differences may be the result of a variety of variables operating in some states, such as shifting proportions of students in the core/less than core groups or variations in ability levels among subgroups of students electing to take core courses.

Types of High School Program

Core or More

A **core or more** program is defined as a typical college preparatory program including:

•English (four years or more)

One year credit each for English 9, English 10, English 11, English 12

•Mathematics (three years or more)

One year credit each for Algebra I, Algebra II, Geometry
One-half year credit each for Trigonometry, Calculus (not Pre-Calculus), other Math courses beyond Algebra II, Computer Math/Computer Science

•Social Studies (three years or more)

One year credit each for American History, World History, American Government
One-half year credit each for Economics, Geography, Psychology, other History (European, State, etc.)

•Natural Sciences (three years or more)

One year credit each for General/Physical/Earth Science, Biology, Chemistry, Physics

Less Than Core

A **less than core** program refers to any high school program consisting of fewer courses than those included in core or more.

Average scores for English, Math, Reading, Science Reasoning, and Composite for 1991 seniors who completed a core curriculum and those who did not are shown in Tables 1 and 2. In general, students who complete core coursework tend to earn higher average scores than students who do not. As Table 2 indicates, this association holds true across racial-ethnic groups. Table 3 shows that regardless of ethnic background, the average Composite score for students who had completed the college core coursework has over the last five years been consistently higher than the average Composite scores of those who did not.

Table 1
Average ACT Scores
By Type of High School Program

	Core or More					Less Than Core				
Reference Group	**E**	**M**	**R**	**SR**	**C**	**E**	**M**	**R**	**SR**	**C**
National	21.8	21.6	22.7	21.9	22.1	18.8	18.2	19.6	19.4	19.1

Table 2
Average ACT Scores
By Type of High School Program and Racial-Ethnic Group

	Core or More					Less Than Core				
National Reference Group	**E**	**M**	**R**	**SR**	**C**	**E**	**M**	**R**	**SR**	**C**
Afro-Amer/Black	18.1	18.0	18.3	18.0	18.2	15.6	15.8	16.0	16.5	16.1
Amer Ind/Alas. Nat.	19.1	19.5	20.2	20.1	19.8	16.4	16.6	17.3	17.8	17.2
Caucasian	22.4	22.0	23.4	22.5	22.7	19.5	18.6	20.4	20.0	19.7
Mex Amer/Chi.	19.3	19.8	20.0	19.8	19.9	16.5	16.9	17.2	17.5	17.2
Asian Amer/Pac.	21.6	24.0	22.4	21.8	22.6	18.8	20.9	19.5	19.5	19.8
P.R./Cuban/Oth.	20.3	20.6	21.1	20.4	20.7	17.1	17.3	17.8	17.9	17.6

Table 3
Trends in Average ACT Composite Scores Across Five Years
By Type of High School Program and Racial-Ethnic Group

National Reference Group	Core or More		Less Than Core	
	N	Composite	N	Composite
All Graduates				
1987	283557	22.8	464740	19.6
1988	342676	22.7	461726	19.4
1989	380253	22.5	445173	19.1
1990	370379	22.3	394540	19.1
1991	387404	22.1	374976	19.1
Afro-American/Black				
1987	18790	18.3	42103	15.7
1988	25054	18.2	43444	15.7
1989	29549	18.1	43508	15.6
1990	29814	18.2	40127	16.1
1991	32468	18.2	39729	16.1
American Indian/Alaskan Native				
1987	1769	20.2	4942	16.8
1988	2366	20.1	5013	16.8
1989	2892	19.8	5453	16.6
1990	3163	19.9	5208	17.1
1991	3727	19.8	5098	17.2
Caucasian				
1987	234114	23.3	369980	20.2
1988	278582	23.2	364211	20.0
1989	305928	23.1	347334	19.8
1990	290929	22.8	301253	19.7
1991	299557	22.7	282708	19.7
Mexican American/Chicano				
1987	5407	20.4	11614	17.0
1988	7436	20.2	11668	17.1
1989	9030	20.1	12731	16.8
1990	9770	19.9	12349	17.2
1991	11143	19.9	12555	17.2
Asian American/Pacific Islander				
1987	7070	23.1	6411	20.3
1988	8627	23.1	6697	20.3
1989	10437	23.2	6729	20.1
1990	11734	22.8	6714	20.0
1991	13401	22.6	7173	19.8
Puerto Rican/Cuban/Other Hispanic				
1987	3148	21.2	4002	17.8
1988	3931	21.4	4249	17.7
1989	4763	21.2	4575	17.5
1990	5250	20.9	4886	17.6
1991	5991	20.7	5006	17.6

The data in Table 4 confirm that the relationship between average ACT scores and patterns of high school coursework is consistent across racial-ethnic groups **and** annual family income levels within those groups.

Table 4
Average ACT Composite Scores
By Type of High School Program, Racial-Ethnic Group
And Annual Family Income

	Annual Family Income					
National	**Less than $18,000**		**$18,000-$35,999**		**$36,000 or more**	
Reference Group	**N**	**Composite**	**N**	**Composite**	**N**	**Composite**
All Graduates						
Total Group	134237	18.6	242189	20.3	334226	21.7
Core	55439	20.1	116172	21.8	187167	23.0
Less than Core	77078	17.6	123649	19.0	143984	20.1
Afro-American/Black						
Total Group	31636	16.3	23222	17.3	13533	18.5
Core	12819	17.3	10758	18.4	7162	19.5
Less than Core	18627	15.5	12308	16.4	6289	17.3
American Indian/Alaskan Native						
Total Group	3317	16.9	3144	18.5	2373	19.7
Core	1111	18.5	1299	19.9	1120	21.0
Less than Core	1950	16.1	1715	17.6	1142	18.5
Caucasian						
Total Group	75218	20.0	188373	20.8	289147	21.9
Core	30669	21.7	90110	22.3	161501	23.1
Less than Core	43601	18.8	96439	19.5	125138	20.3
Mexican American/Chicano						
Total Group	9005	17.3	8220	18.7	5414	20.0
Core	3824	18.7	3890	19.9	2976	21.2
Less than Core	5119	16.2	4287	17.5	2419	18.5
Asian American/Pacific Islander						
Total Group	4856	18.7	6133	21.1	8725	23.6
Core	2806	19.7	3872	21.9	6013	24.3
Less than Core	1998	17.3	2200	19.7	2574	21.9
Puerto Rican/Cuban/Other Hispanic						
Total Group	3387	17.5	3766	19.3	3337	21.2
Core	1501	18.8	2037	20.5	2154	22.2
Less than Core	1825	16.4	1684	17.8	1164	19.3

Student Self-Reported Information

When students register for the ACT Assessment, they are asked to provide information about themselves, their programs of study, their interests, needs, and plans. Selected summary information about these topics is reported in the tables below.

Students provide the last course grades they received prior to senior year in four subject areas: English, Mathematics, Social Studies, and Natural Sciences. As Table 5 shows, grades have increased slightly in all areas over the past five years.

Table 5
Average High School Grade Point Averages

Reference Group		English	Mathematics	Social Studies	Natural Sciences	Overall Average
National	1987	2.97	2.69	3.06	2.86	2.89
	1991	3.00	2.73	3.09	2.91	2.92

Table 6 displays the percentages of 1991 ACT-tested graduates who expressed need for help with educational/occupational planning and selected academic concerns. As they have in recent years, significant numbers of these students want help with planning and with study skills and math.

Table 6
Expressed Need for Help

Need Help In:	Nation
Educational/Occupational Planning	43
Expressing Ideas in Writing	28
Reading/Comprehension	30
Study Skills	45
Math Skills	42

Table 7 compares percentages of students selecting the most commonly chosen majors in 1987 and 1991. During this period, interest in Business has declined, while interest in Health majors has increased.

Table 7
Percentages Choosing Selected Majors
By Graduation Year and Gender

National Reference Group	Men	Women	Total
Business			
1987	21	23	22
1991	18	18	18
Computer/Information Sciences			
1987	5	2	4
1991	3	2	2
Education			
1987	4	11	8
1991	5	12	9
Engineering			
1987	19	3	10
1991	19	3	10
Health Professions			
1987	8	16	12
1991	10	20	15

Table 8 provides average ACT Composite scores for various racial-ethnic groups from 1987 to 1991. Trend information is provided for each reference group represented by 500 or more ACT-tested graduates each year. Over the five-year period, national average scores for most minority groups have shown steady increases.

Table 8
Trends in Average ACT Composite Scores*

National Reference Group	N	Composite
Total Graduates		
1987	777424	20.8
1988	842322	20.8
1989	855171	20.6
1990	817096	20.6
1991	796983	20.6
Afro-American/Black		
1987	61763	16.5
1988	69509	16.6
1989	74227	16.6
1990	71197	17.0
1991	72681	17.0
American Indian/Alaskan Native		
1987	7358	17.5
1988	8096	17.6
1989	9115	17.5
1990	9101	18.0
1991	9358	18.2
Caucasian		
1987	610737	21.4
1988	650999	21.4
1989	661010	21.3
1990	605361	21.2
1991	588060	21.3
Mexican American/Chicano		
1987	17448	18.1
1988	19717	18.3
1989	22685	18.1
1990	22806	18.3
1991	23837	18.4

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Table 8
Trends in Average ACT Composite Scores*

National Reference Group	N	Composite
Asian American/Pacific Islander		
1987	13885	21.7
1988	15854	21.8
1989	17751	21.9
1990	19081	21.7
1991	20854	21.6
Puerto Rican/Cuban/Other Hispanic		
1987	7564	19.2
1988	8622	19.4
1989	9880	19.3
1990	10669	19.3
1991	11135	19.3

*All average scores are on the scale for the Enhanced ACT Assessment. Averages for 1987-1989 are based on scores estimated from a concordance table linking the scale for the original version of the ACT Assessment to that of the Enhanced ACT Assessment. Annual national trends in ACT scores beginning with 1969-70 are available on request.